

Claims:

1. A method of automatically allocating a mailbox to a called party in a digital
5 telephone network, including the steps:
receiving a call to be routed to a called party;
extracting one or more relevant predefined parameters from the call;
using one or more of the extracted parameters to determine the existence of a mailbox
associated with the called party;
10 if an associated mailbox exists, translating the call to that mailbox address;
if there is not a mailbox number associated with the called party, allocating a mailbox
from a pre-existing pool of mailboxes available for allocation to the called party;
diverting the call to the allocated mailbox.
- 15 2. A method according to claim 1 including the steps:
receiving a call to be routed to a called party;
extracting one or more relevant predefined parameters from the call to identify the nature
of the caller and the nature of the called destination including the called party's telephone
20 number;
using one or more of the extracted parameters to examine a database, archive,
information listing or the like to determine the existence of mailbox identifier associated
with the called party;
if an associated mailbox exists, translating the called number to that mailbox address;
25 if the database does not contain a mailbox identifier associated with the called number,
allocating a mailbox from a pre-existing pool of mailboxes available for allocation to the
called party's telephone number;
diverting the call to the allocated mailbox;
notifying the called party of the waiting message.

30

3. A method according to claim 1 or claim 2 including the step of deleting the contents of the mailbox, de-allocating the mailbox and returning it to the pool of mailboxes available for allocation on the occurrence of any one of following events:

no message deposits and message retrievals have been made within a pre-defined period;

5 or no message deposits have been made within a pre-defined period; or

no message retrievals have been made within a pre-defined period.

4. A method of maintaining a pool of mailboxes available for allocation, de-allocation and re-allocation, and thereby minimising the amount of required storage space for the said pool, including the steps:

10 at a predetermined time frequency, scanning a database of mailbox allocation and usage records;

from those records, detecting an allocated mailbox and determining its last usage time;

15 if the last usage time exceeds a predetermined period, deleting the contents of the mailbox and marking the mailbox as free for re-allocation;

continuing until all mailbox records have been scanned at which time the process is suspended until it conducts another cycle at the said predetermined time frequency.

20

5. A method of dynamically allocating a mailbox to a called party in a digital telephone network, comprising the following steps:

receiving a call to be routed to a called party;

extracting relevant/predefined parameters from the message;

25 examining / inspecting a database as to the existence of an associated mailbox number

translating the called number to a mailbox address, if available or, in the event that the called party does not have a mailbox/ the database does not contain a mailbox number associated with the called number , assigning a mailbox to the called party telephone number;

30 diverting the call to the allocated mailbox.

6. A method according to claim 5 in which the mailbox is allocated from a pre-existing pool of mailboxes.

5

7. A method according to claim 5 or claim 6 in which the called party is identified by a digital network telephone number / telephony network identifier.

10 8. A method according to claim 5 or claim 6 in which the mailbox is identified by an identification number.

15 9. A method according to claim 8 in which the method of automatically associating a telephony network identifier / digital network telephone number is with a mailbox identification number.

10 10 A method according to claim 9 in which the method of the automatic association
20 / allocation process can be initiated in any one of the following events:
the called party does not answer the call;
the called mobile network subscriber/party does not have a mailbox;
the call does not originate from the called party (under "Option A" herein).

25

11. A method according to any one of claims 5 to 10 including the step of deleting the contents of the mailbox and de-allocating the mailbox on the occurrence of any one of following events:
no message deposits and message retrievals have been made within a pre-defined period;
30 or
no message deposits have been made within a pre-defined period; or

no message retrievals have been made within a pre-defined period.

12. A method according to claim 11 including the step of de-associating the mailbox
5 from the subscriber identifier on the occurrence of any one of following events:

no message deposits and message retrievals have been made within a pre-defined period;
or

no message deposits have been made within a pre-defined period; or

no message retrievals have been made within a pre-defined period.

10

13. A method according to claim 11 or claim 12 including the step of returning the
de-allocated mailbox to the pool of mailboxes available for re-allocation.

15

14. A method according to claim 13 in which the re-allocating of the mailbox can be
to a new mobile network subscriber upon the occurrence of any one of following events:

no message deposits and message retrievals have been made within a pre-defined period;
or

20 no message deposits have been made within a pre-defined period; or

no message retrievals have been made within a pre-defined period.